

Department of Planning, Building and Code Enforcement JOSEPH HORWEDEL, DIRECTOR

BUILDING DIVISION

PLAN CHECK NOTE

From: Building Plan Check PCN #9

Previous Version: 12-10-02 Revised Date: 4-28-2008

Subject: Installation of New Equipment in Existing Building

Code reference:

2007 California Building Code

Purpose:

To provide direction to building owners on how to verify the adequacy of the structural system for the new equipment loads.

Findings:

When significant numbers of new equipment is installed in existing buildings, the following procedure shall be followed to verify the adequacy of the structural system for the new loads:

- 1. All vertical load carrying elements shall be verified for adequacy in resisting the additional loads. A complete load path shall be considered all the way to the foundation.
- 2. The tributary mass (dead load) of the level where the new equipment is installed shall be calculated (except at ground level). If the weight of the equipment exceeds 5% of the calculated dead load at that level (or the weight assumed in the original calculations), a seismic evaluation of the diaphragm and related items (i.e. anchorage, shear transfer, etc.) shall be performed and remedial work shall be performed as necessary.
- 3. The total mass of the entire building shall be calculated. If the weight of the equipment exceeds 5% of the calculated building dead load (or the weight assumed in calculating base shear in the original design), a complete seismic evaluation of the building shall be performed and appropriate remedial work shall be addressed as necessary.